SECTION 2.5

EEL RIVER WATERSHED MANAGEMENT AREA

MANAGEMENT AREA DESCRIPTION

The Eel River Watershed encompasses roughly 3,684 square miles in highly erodable soils in the steep coastal mountains of the NCR, supporting a variety of water uses including municipal and agricultural supply systems, salmonid fisheries, and recreation. Surface water in many areas is intimately connected with the ground water along the nearby alluvial valleys, thereby having a profound effect on local groundwater supplies. The Eel River Watershed is also a prime recreational area boasting numerous state and private campgrounds along its length with both contact and non-contact uses such as boating and swimming. The Eel River is the third largest producer of salmon and steelhead in the State of California and supports a large recreational fishing industry. The erodable soils, steep terrain, and timber production evoke a high level of concern for the anadromous fishery resource. Coho salmon were listed as endangered under the federal Endangered Species Act in 1997.

It is heavily forested and as such, heavily utilized for timber production. Numerous activities occur within the watershed that may result in potential adverse effects to the beneficial uses of the Eel River Watershed. Municipal, agricultural, and recreational uses may be impaired through discharges to surface water bodies from chemical, biological, and sedimentary materials entering the surface water system. A few of the many activities which, if conducted improperly, are likely to impair surface water beneficial uses include: illegal waste disposal, vehicle and railroad maintenance yard operations, herbicide application, gravel extraction, timber harvesting, road building, dairy operations, automotive wrecking yard activities, wood treatment facilities, publicly owned treatment works, and failing septic systems.

IMPLEMENTATION STRATEGY

Significant strategy development and implementation for water quality protection and improvement are occurring in the Eel River WMA at the present time by many agencies, interest groups, and individuals. We recognize that the WMA problem identification, watershed assessment, and strategy development are an on-going process, and that further input as we proceed will improve the effort. The intent of the Regional Water Board process is to focus resources on the highest priority issues within a given time frame. The issues identified in FY 1997-98 and resultant proposed actions are prioritized in recognition of shifting resources. As such, this document and the implementation of actions to address issues and achieve water quality goals are flexible. Lower priority issues that are not addressed within a planned cycle will be shifted into the following cycle, likely with higher priority so that they will be addressed. Likewise, it is important to note that some activities necessarily will carry through from one cycle to the next, e.g., monitoring, core regulatory programs, etc.

A working staff level Watershed Team within the Regional Water Board office developed and prioritized the actions presented in this document.

Institutional framework

The following is a brief description of the existing agency and public framework with respect to water quality issues. It is not all-inclusive and will be refined by the Eel Watershed Team and through the public participation process. A matrix of agency's abilities and jurisdictions with

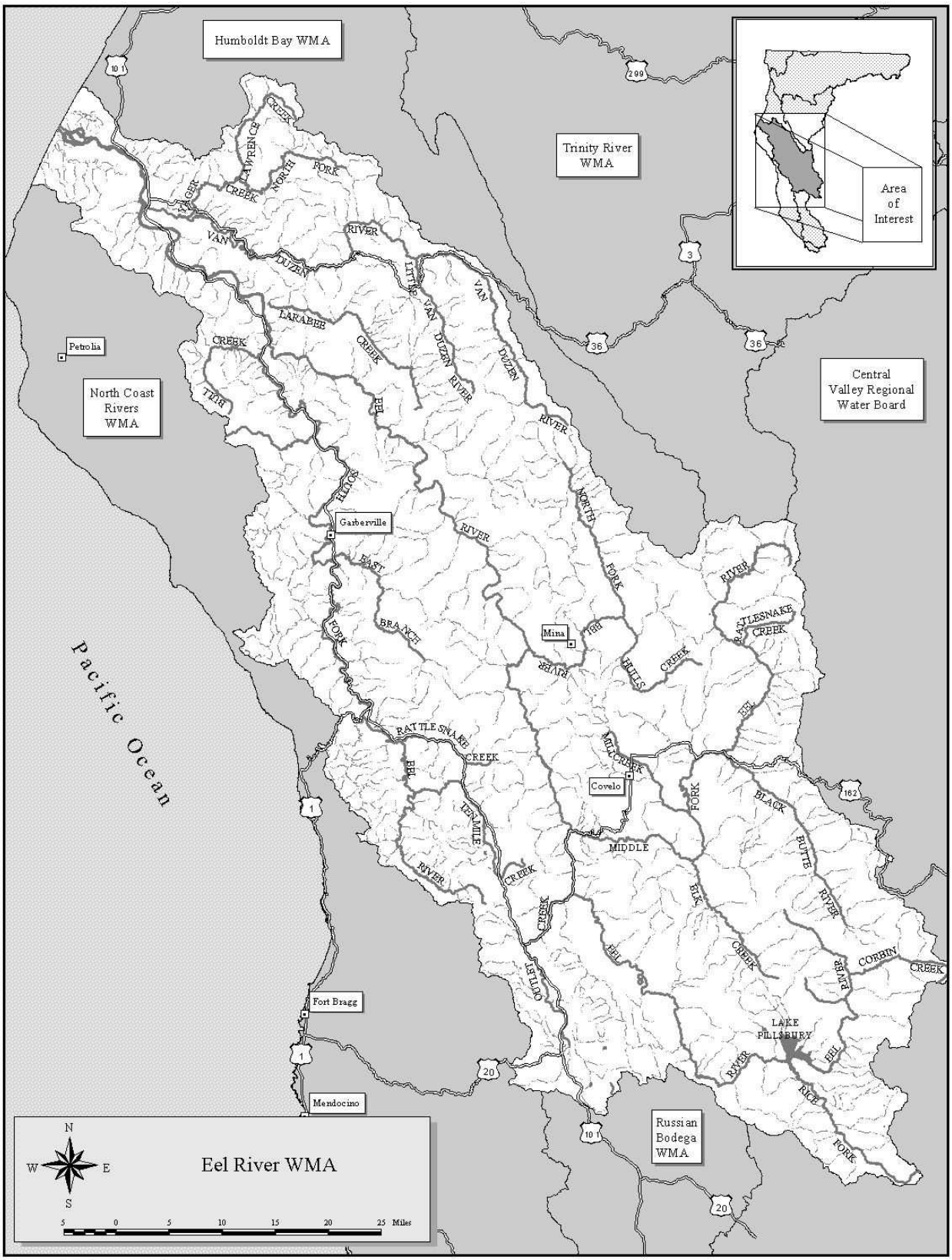

Figure 2.5.1. Eel River WMA

respect to the identified goals will be compiled to provide an overall picture for the management area.

The *Water Quality Control Plan for the North Coast Region* (Basin Plan) contains specific water quality objectives and implementation programs to protect and enhance identified beneficial uses of water. Over-arching regulatory provisions of the Basin Plan are the discharge prohibitions section, which prohibits direct waste discharge to all freshwater surface waters in this management area except during the winter and at specific dilution rates. The State's Nonpoint Source Pollution Control Program also is referenced in the Basin Plan and forms the basis for addressing non-timber nonpoint source pollution, such as from agricultural operations. Likewise, there are regulations within the implementation section of the Basin Plan addressing waste discharges from logging, road building, and associated construction activities. The policies regarding individual wastewater systems contained in the Basin Plan provide guidelines for local agency jurisdictions to prevent water quality degradation from septic systems.

The state *Water Quality Control Policy for the Enclosed Bays and Estuaries of California* provides water quality guidelines for the prevention of water quality degradation and to protect the beneficial uses of bays and estuaries in the state.

The California Department of Fish and Game developed an *Eel River Salmon and Steelhead Action Plan* (final draft, August 1997) that identified ten general actions to address problems in the Eel River watershed. The primary actions recommended are reducing watershed erosion and improving fish habitat and riparian areas. Additionally, the US Bureau of Land Management and US Forest Service completed watershed analyses for four sub-watersheds (South Fork, North Fork, Middle Fork and Van Duzen River) and compiled information for a preliminary assessment for the main stem Eel River. The State Department of Parks and Recreation also evaluated sediment problems in the Bull Creek watershed. We will use those sources of information in refining our actions and goals, as well as in the development of TMDL waste reduction strategies for sediment in the Eel WMA.

The Regional Board has an open public process for permit adoption and renewal, as well as Basin Plan changes. Consistent with that process, a WMA workshop will be held in the WMA, and special task forces or work groups may be formed to help identify water quality issues and strategies. With respect to other agencies and groups in the management area, a list is offered for informational purposes in Appendix 2.5-A. It is our intent to continue to coordinate with the listed agencies and groups (and others that may have inadvertently been left out), enhancing our relationships where definite water quality benefits can be realized.

Summary of Activities

The general emphasis in the WMA is to increase assessment activities (including monitoring coordination) and education/outreach, especially regarding erosion control and sedimentation. While maintaining a watchful eye on traditional point source dischargers, forestry related activities are a high priority.

<u>Assessment and Monitoring:</u>

Additional assessment needs were identified for erosion/sedimentation and ground water issues. Assessment of existing data was a key element in the TMDLs for the South Fork Eel and Van Duzen rivers. There is a need to organize surface and ground water data to more effectively describe conditions in the WMA and direct future monitoring activities. For instance, additional emphasis should be directed to evaluating the connection between surface and ground waters in urbanized/industrialized areas and the potential for cross-contamination. A system to gather and analyze existing information on a spatial perspective has been suggested.

A monitoring workshop has been suggested to improve coordination, standardize protocols, develop an information bank, and foster a volunteer monitoring program. We will provide some staff assistance and request additional funding to assist the Humboldt RCD in continuing a temperature monitoring and screening program in the watershed. Likewise, the need to monitor both the implementation and effectiveness of watershed enhancement efforts should be addressed, as well as bacterial quality at popular recreation sites in the South Fork Eel and Van Duzen Rivers.

Two new state programs will improve monitoring and assessment in the WMA beginning in FY 2000-01 and continuing:

The North Coast Watershed Assessment Program (NCWAP) is a multi-agency approach to gathering, developing, analyzing and presenting watershed assessments and data for north coast watersheds. In addition to the NCRWQCB, four agencies within the Resources Agency are involved: Department of Fish and Game, Department of Forestry and Fire Protection, Division of Mines and Geology, Department of Water Resources. Each has specific tasks relating to gathering existing data, filling information gaps by collecting new data, analyzing the data, and presenting the resulting watershed assessments in a standardized format for agency, landowners, and watershed groups. NCWAP will be closely coordinated with SWAMP and the outreach functions of the WMI Coordinator in the NCRWQCB. Within this WMA the following watersheds are scheduled for assessment in the next three fiscal years: FY 2001-02—North Fork Eel watershed, middle and lower Eel watersheds; FY 2002-03—upper and middle Eel watersheds.

The Surface Water Ambient Monitoring Program (SWAMP) is a regionwide monitoring program that will monitor permanent stations for long-term trends as well as rotate into WMAs on a five-year basis. Up to five stations are scheduled as a permanent stations, sampling began in early 2001: South Fork at confluence, Bull Creek, and near Branscomb; Eel River at Dos Rios; Middle Fork at Dos Rios. The rotation for intensive monitoring is scheduled for FY 2001-02 along with the Humboldt WMA.

Monitoring and assessment needs are detailed in Appendix 2.5-B.

Education and Outreach:
Pollution prevention activities were highlighted by the Watershed Team as a high priority activity. Increased education and outreach should be addressed for erosion control, other storm water issues, confined animal facilities, management and disposal of toxics, monitoring and assessment, and the core regulatory program.

Coordination:
Tied in closely with education and outreach is the need for enhanced coordination. We participate in a few activities beyond our day-to-day work that are aimed at improving communication and coordination to the benefit of improved water quality. Improving the interaction with other agencies and the public is a goal that will require additional funding or redirection of resources.

Core Regulatory:
The Watershed Team proposes maintaining the current level of point source regulation (inspection, monitoring, and enforcement) on traditional dischargers, while increasing the level of involvement in storm water and confined animal waste management issues. Concern was raised about publicly owned treatment works discharging to infiltration ponds in the floodplain and the potential for recreational use impairment. In addition to core regulatory are the underground storage tanks program and toxic site cleanups. Additional emphasis should be directed to evaluating the connection

between surface and ground waters in urbanized/industrialized areas and the potential for cross-contamination. Involvement in the gravel mining issues in the WMA should continue, especially as regards stream channel geomorphology and potential effects on the anadromous salmonid resources.

Ground water:
Ground water issues center on petroleum and metals contamination and the potential for cross contamination between surface and ground water. As mentioned above, assessment of existing data is needed to provide an overall picture of contamination and to guide future monitoring efforts. Groundwater and surface water contamination is suspected at former and existing mill sites that historically used wood treatment chemicals. Discharges of pentachlorophenol, polychlorodibenzodioxins, and polychlorodibenzofurans likely occurred with poor containment typically used in historical wood treatment applications. These discharges persist in the environment and accumulate in surface water sediments and the food chain. Additional investigation, sampling and monitoring, and enforcement actions are warranted, but insufficient resources exist to address this historical toxic chemical problem.

Nonpoint Source:
Continued involvement in the forestry issues is necessary to ensure protection of aquatic resources. The recent listing of coho salmon as threatened under the federal Endangered Species Act and the lawsuit against USEPA for TMDL development has put the spotlight on all land use activities that potentially may increase sedimentation or otherwise affect habitat. The Team suggests increasing work with local agencies and groups regarding land use effects on water quality, following the State Nonpoint Source Pollution Control Program strategy of first emphasizing "voluntary" self-determined implementation of controls to reduce nonpoint source pollution. An active outreach program will enhance the effectiveness of the program.

Response to section 303(d) requirements for waste load reductions included sediment TMDLs for the South Fork Eel River (adopted in December 1998) and Van Duzen River (adopted in December 1999). Additional information is contained in Section 2.7. Issues of listing additional streams in the WMA will be addressed through the Water Quality Assessment process.

Timber Harvest:
We have an extensive Timber Harvest program where staff review and inspect timber harvest plans for implementation of the Forest Practice Rules and best management practices to ensure protection of water quality and beneficial uses. We participate in the Timber Harvest review process as a "review team" agency, with the California Department of Forestry and Fire Protection (CDF) as the lead agency for timber harvest plan review and approval. In our role as a review team agency, we review and make recommendations on timber harvesting plans in an effort to ensure protection of water quality and beneficial uses (i.e., Basin Plan compliance). Interim provisions of the Forest Practice Rules require that CDF not approve any plans that do not comply with water quality objectives. We are working both within the timber harvest plan review process as well as under our own authority to require instream water quality monitoring for fine sediments so as to 1) assess long term water quality trends, 2) evaluate effectiveness of timber harvest-related best management practices and prescriptions in ensuring Basin Plan compliance, and 3) provide a feedback loop for timber owner-operators to allow for timely identification and response to sediment discharges from timber harvest and related activities, as well as to provide information to assist with future timber harvest planning. We are expanding our program activities on private land in concert with California Department of Forestry and Fire Protection. We are also expanding our review and inspection of timber sales as well as other projects on U.S. Forest Service lands.

An estimated 25% of the timber harvested in the Region occurs in this hydrologic area. The primary water quality issues are discharges of sediment due to surface erosion and mass wasting (landslides). Beneficial uses of primary concern include aquatic habitat, especially the recovery of threatened and endangered species of coho salmon and steelhead trout, and protection of domestic water supplies in small rural communities. Stream temperature is of specific concern in this area. Forest herbicide application is an issue of concern. Mendocino National Forest is located in this area and is the primary federal timber agency.

Local Contracts:
We will continue active involvement in the Clean Water Act sections 319(h) and 205(j) grant programs, the Water Bond (Proposition 13) grant program, as well as promoting other programs like the California Department of Fish and Game restoration programs. We are currently managing a 319(h) grant with the California Coastal Conservancy funding implementation of dairy improvements. Another 319(h) grant with the Humboldt County Resource Conservation District put underway in April 2000 to implement landowner improvement projects that will improve water quality and salmonid habitat.

Water Quality Planning:
The Basin Plan review process feeds into the activities to the extent issues were identified in the Triennial Review and applicable to the Eel River WMA. The top priority issues are:

- Consider revisions to the water quality objectives for dissolved oxygen and temperature
- Review the Nonpoint Source Control Measures.

Additionally, the water quality attainment strategies for the section 303(d) waterbodies will be incorporated into the Basin Plan.

Evaluation and Feedback
We plan to evaluate the overall effectiveness of the process on a yearly basis, adjusting the activities as appropriate. Emerging issues of large magnitude or high priority may cause early re-evaluation and shifting priorities. The final evaluation will feed into the next cycle of assessment and problem identification.

ASSESSMENT AND PROBLEM IDENTIFICATION

In general, the primary issues associated with water quality in the Eel River WMA are focused on the beneficial uses for drinking water supply, recreation, and the salmonid fishery. Since the watershed is located in steep forested terrain with highly erosive soils and high rainfall, erosion and sediment production and transport are high. For most of the watershed the issues of temperature and sedimentation and their impacts on the salmonid fishery are of high concern, involving the timber and rangeland industries. Other issues include ground water contamination, dairies in the delta area near the ocean, and localized contamination of surface and ground waters.

At Lake Pillsbury, the Regional Water Board has concerns about mercury bioaccumulation in fish and after public hearings will recommend that the lake be placed on the CWA 303(d) list of impaired waterbodies for mercury. The National Marine Fisheries Service has issued no take permits for endangered species in the lake. There are underground tanks in the area that are leaking and have contaminated private domestic wells. There also fueling stations on the dock in the marina and above ground piping in the lake area that are of concern. PG & E and US Forest Service are conducting a restoration project in Soda Creek. A scoping project is being done for logging for fuel reduction on the lakeshore at Summerhome. The Eel River is partly diverted to the Russian River through a PG & E power generation plant at Potter Valley. There is a lumber mill operated by Louisiana Pacific at

Van Arsdale where a cleanup is partially complete, but dioxin and furans are still detected in the mainstem of the river. Sedimentation is also a problem here.

On the North Fork Eel River where the land is owned by the Bureau of Land Management, the US Forest Service and private parties there is still a lot of timber harvesting being done. This is an area of natural instability with highly erodable soils so that erosion and sedimentation of the water ways is a concern. The other major land use is cattle grazing which may also cause soil erosion. The waste water treatment plant in the Covello/Dos Rios area with a daily capacity of about 100,000 gallons is poorly maintained and potentially discharges to the Eel River. Investigation and enforcement needed to be increased on the treatment plant. The Round Valley Reservation uses a septic system that may also have problems. There is an old railroad maintenance yard in this area with hazardous waste issues that need to be addressed. The landfill on Refuse Road is now closed and has been changed to a transfer station, but still needs to be investigated.

At the City of Willits, the treatment plant sometimes discharges to Outlet Creek in excess of the 1 percent discharge rate. The City will be subject to Phase II of the NPDES Storm water permits under which all storm water must be controlled. The Remco plant in Willits continues control discharges of VOCs to prevent spills to Baechtel Creek and the ground water plume contaminated with VOCs and hexavalent chrome continues to be cleaned up. The Page chrome pits that were used by Remco in the past and have contaminated ground water and soil are being monitored. In addition, the City has several above ground and under ground tanks that are potential problems.

At Laytonville, there are septic systems that are failing and the town wants to connect these systems to the sewer system that is in place. West of town there is a new vineyard that may be failing and needs investigation. At the Laytonville dump the local indian tribe has obtained a grant from USEPA to conduct ground water monitoring and they have detected arsenic which is also being detected in local private drinking water wells. The Northwestern Railroad has a rail line that runs parallel to the Eel River through highly erodable, unstable land where landslides are common. This railroad has been closed and there is an effort under way to open the line between Willits and Eureka. The Department of Toxic Substance Control, the Department of Fish and Game and the Regional Water Quality Control Board are all concerned with slide issues, fish issues, and debris cleanup issues involved with reopening the railroad line. Near Island Mountain there has been extensive sliding, and there are cleanup problems and a poor sewage system that needs investigation. The railroad has an old storage area here where hazardous wastes are contained in drums and tanks. The iron mine on Island Mountain is still discharging heavy metals to the river. Action is needed on these issues.

In the town of Garberville there is a gas station with leaking underground tanks and a bulk oil tank that is also leaking. In the surrounding areas private growers have problems with fuel tanks on electrical generators leaking and contaminating soil and possibly surface and ground water. Unical has a Waste Discharge Requirement for sparging ozone. The dam at Benbow may present fish passage problems that will have to be addressed by the Department of Fish and Game. At Humboldt Redwoods State Park near Weott there has been considerable restoration work done, especially in Bull Creek. The California Department of Transportation is also involved in restoration, erosion control and runoff projects in this area. The area along Highway 36 has soil stability problems and there is concern about the small communities along the highway that may have waste disposal problems.

In the lower Eel River area, the town of Scotia has a municipal runoff problem and Pacific Lumber Company has a permitted ash dump where Regional Water Board staff is currently taking enforcement action. There are also upland and in-stream quarries near Scotia that need investigation. At Rio Dell there are discharge problems from the municipal treatment plant in the summer and a

sludge disposal problem. Eel River Saw Mill, which is being sold, has a NPDES storm water permit. The towns of Scotia, Ferndale, and Rio Dell will get Phase II NPDES storm water permits. At the town of Redcrest there is an underground tank that is leaking MTBE to the river and a failing onsite disposal system that needs investigation. In the Ferndale and Fortuna areas there are about 85 dairies many with manure management problems and some where cows have direct access to streambanks.

Pacific Lumber Company (PALCO) is harvesting heavily, above quantities in the Sustained Yield Plan, in the lower Eel River and Van Duzen River watersheds including Bear, Stitz and Jordan Creeks. PALCO is currently conducting a watershed analysis in this area and there is extensive Regional Water Board oversight. However, since harvesting is so heavy the Regional Board will be issuing an enforcement order to stop harvesting in Bear Creek. There is also cattle grazing on PALCO land and many roads that are poorly maintained and are contributing sediment to local creeks which are aggrading and causing flooding and domestic water supply problems. The Regional Water Board is conducting a watershed analysis in the lower Eel River area and conducting effectiveness monitoring downstream of where PALCO has installed BMPs.

WATER QUALITY GOALS AND ACTIVITIES

The four goals for the Eel River WMA are related through the beneficial uses they address:

- **GOAL 1: Protect and enhance the salmonid resources (COLD*)***
- **GOAL 2: Protect other surface water uses (MUN, AGR, REC 1, REC-2)**
- **GOAL 3: Protect ground water uses (MUN, IND. AGR, REC-1, REC-2)**
- **GOAL 4. Protect warm water fishery resources**

Protection of surface water (GOAL 2) for the primary beneficial uses MUN, AGR, REC-1 and REC-2 will in most cases protect all other beneficial uses. The MUN (municipal and domestic supply) beneficial use designation is for uses of water for community, or individual water supply systems including, but not limited to, drinking water supply. It demands, therefore, the highest quality of water. The REC-1 (water contact recreation) beneficial use designation is for uses of water for recreational activities involving body contact with water, where ingestion is reasonably possible. This beneficial use also demands a high degree of water quality. If MUN and REC-1 beneficial uses are protected then it follows that agricultural and industrial supplies are also protected which relates GOAL 2 to GOAL 3. The protection of cold and warm water fisheries (GOALS 1 and 4) requires the protection of surface and ground waters (GOALS 2 and 3) along with additional concerns for siltation, habitat loss, low tributary flows and water temperature. Therefore, by protecting the beneficial uses that demand the highest quality waters most components supporting the other beneficial uses also will be protected.

GOAL 1: Protect and enhance the salmonid resources (COLD*)*

The cold water fishery, specifically trout, steelhead, and salmon, is of concern regarding sedimentation and other potential impacts to habitat and water quality. The following Nonpoint Source issues were identified by the Regional Water Board staff and relate directly to concerns about the cold water fishery:

- Stream Sedimentation: A large portion of the watershed supports commercial timberlands, and concern has been raised regarding the past and present impacts of timber harvest. Logging roads are a concern due to increased runoff and delivery of sediment to local waterbodies on private and federal lands. There is a need to provide a clear linkage between numerous small upland or upslope activities and larger problems downstream in the waterways. Changes in the morphology of channels have occurred from increased sedimentation rates; shallower, wider channel form increases insolation, decreases low flow

velocity, increases deposition of very fine material. Sedimentation of small streams in the Eel River delta has caused localized flooding and accelerated erosion in some cases from redirected stream channels. Gravel extraction increasing in the upper Eel watershed is a concern. The regulation of gravel extraction is primarily through a US Army Corps and California Department of Fish and Game process.

- Past and current timber harvest practices have decreased the canopy cover over tributaries and the mainstem of the river. Lack of canopy cover increases the solar radiation reaching the water and increases water temperature. High water temperatures are detrimental to cold water fisheries'reproduction.
- Potential impacts from dairies and grazing have not been fully evaluated. Concern has been raised regarding dairy industry and grazing impacts to the watershed from direct discharges of waste and/or whey, animals in the creeks and waterways, trampling of stream banks, and other erosion mechanisms. Dairies should be brought up to Title 27 standards. Grazing issues include erosion and sedimentation, and water chemistry issues.
- Ground water contamination concerns, as well as erosion and sedimentation issues should be included in outreach and education activities. Problem sites should receive progressive enforcement per the State's Nonpoint Source Pollution Control Program.
- Herbicide application on private and public lands is a water quality concern.
- Interbasin transfers of water and regulated flows from dams affect sediment, flow, and temperature dynamics. These activities may contribute to the impairment of the beneficial uses.
- The seasonal erection of Benbow Dam has raised temperature and migration issues for anadromous salmonids.

Point Source Issues

Current Activities

- Continue regulation of point sources**.**

Nonpoint Source Issues

Current Activities

- Implement and enforce best management practices for nonpoint source regulation. These actions include inspection of nonpoint source dischargers, joint participation among landowners, government agencies, and other stakeholders to develop and implement better land-use practices, and follow road construction and maintenance standards that minimize soil disturbance and erosion throughout the watershed.
- Work with the timber industry to address timber harvest impacts and issues (i.e., erosion, herbicides and riparian management). Work with USFS regarding timber harvest related activities, including road building and road abandonment, in the upper Eel River Basin.
- The North Fork, Middle Fork, and upper mainstem Eel are scheduled for sediment and temperature TMDLs in 2002, 2003, and 2004, respectively. The process to establish sediment reduction strategies will involve considerable public outreach, assessment of sources, assessment of impairments, development of quantifiable targets, consideration of feasible solutions to reduce sources, and coordinated monitoring. We will work with EPA on TMDL development and implementation/outreach, and prepare for Basin Plan amendments.
- Investigate herbicide impacts to surface and ground water.

- Implement and enforce best management practices for nonpoint source regulation for herbicide applications, increase interagency coordination and use task force to target bad operators. Investigate herbicide impacts to surface and ground water. Work with CalTrans on NPS discharges from roadwork.
- Promote grants for nonpoint source studies and implementation.
- Manage funded 319(h) projects, including the new project for dairy outreach and pollution control activities.
- The NCWAP will begin assessment activities in the WMA in FY 2002-03. We will be part of the effort that will satisfy a number of assessment concerns and provide the assessment and data in a computerized database that can be housed in the watershed.

Additional Needs

- Develop strategies for erosion prevention and reduction of sedimentation to support implementation of the TMDL process. These actions include joint participation among landowners, government agencies, and other stakeholders to develop and implement better land-use practices, and follow road construction and maintenance standards that minimize soil disturbance and erosion throughout the watershed.
- Promote erosion prevention and sediment control educational materials and programs for small and rural landowners by placing educational handouts at local permit offices, performing more outreach, developing a road map of responsible groups/agencies to assist an individual landowner in a given waterbody or type of problem or situation, and promoting erosion prevention and sediment control regulations. Existing information needs to be identified so that we can assess impacts to the system and address problem areas such as comparing new air photos with historical air photos and noting changes in the morphology of channels. This will give us the locations of "hot spots". Meet with agencies responsible for issuance of permits to discuss their process and BMP's for water quality.
- Inspect construction sites for erosion prevention and sediment control measures, encourage local agencies to adopt and enforce local ordinances for erosion prevention and sediment control measures. Increase storm water program resources.
- Fund PYs for coordinating our functions with other agencies on a watershed basis. This activity includes work with agricultural, silvicultural, and urban runoff discharges, primarily through grant-funded projects, volunteer monitoring coordination, and public education and outreach to reduce sediment discharges from nonpoint sources. This activity could include issues associated with land use planning regarding riparian encroachment and flood plain use.
- Promote Tax Incentives for Erosion Controls. Tax incentives for erosion control and aquatic restoration activities should be supported and pursued. Decreasing road density on upland slopes and decommissioning problem roads were two potential targets of such an incentive program.
- Promote enhancement of riparian areas through grant funding, public education and outreach, and coordination and assistance to other agencies and groups to improve its functions for shading, buffering land use impacts, bank stabilization, and habitat.
- Improve habitat conditions for anadromous fishes by assisting and coordinating with CDF&G and local agencies and groups in fishery assessment and emerging issues and by promoting grant funding for stream rehabilitation. Discuss instream removal of "sinker" logs with CDF&G to aid in developing better standards through 1600 series permits process. Obtain any data available on stream temperatures in this area. Provide comments to CDF&G on the *Eel River Action Plan*. Identify process steps involved in gravel extraction permitting. Coordinate with Army Corps and Fish &

Game to identify most sensitive areas for fishery habitat. Collect information from County public works departments and CalTrans on road repairs (locations, work needed, etc.) for tracking in watershed database.

- Increase coordination with RCDs and agricultural community to deal with rangeland and confined animal problems; erosion, bank erosion, animal waste in streams.
- Seal waste pits and ponds. RCD/Regional Board and other agencies to host watershed group meetings to receive input, and provide education on BMP's. Develop Regional Board approach to implementation of Rangeland Management Planning process. (Tied to coordination with RCDs). Irrigate agronomically. Nutrient budget for spreading waste (not disposal, but agronomic use). Coordinate closely with County Health and other local agencies that see the problems every day. Conduct outreach and education along the lines of the SF Bay area effort by Region 2.
- Continue active participation in the CalTrans Vegetation Management Advisory Committee and increase time commitment. Work more closely with CDF and timber industry on NPS herbicide issues.
- Coordinate water rights/dams issues with SWRCB and other agencies.
- Staff should be part of the process and decision criteria regarding amounts, locations, and seasonality of gravel extractions.
- Coordinate with CDFG in the evaluation of the effects of Benbow Dam.
- Encourage the local planning agencies to endorse the concept of a riparian corridor reserve and develop a model erosion control ordinance for all grading and building projects less than 5 acres in size due to the sensitive nature of the watershed. Coordinate with local agencies, CalTrans, and the Railroad Authority to develop and implement best management practices for erosion control.
- Develop and implement a focused sampling program for temperature, sediment loading, geomorphology changes and water quality in upper mainstem Eel River. These issues will be addressed largely by the NCWAP in FY 2001-02 and 2002-03, and to a degree in the FY 2001-02 SWAMP intensive survey, depending on resources
- Support CDFG efforts to identify the extent of squawfish predation on salmon and steelhead populations and evaluate management strategies to eliminate squawfish predation and/or population within the river and Lake Pillsbury.
- Coordinate with CDFG to evaluate removal of railroad debris

GOAL 2: Protect other surface water uses (MUN, AGR, REC-1, REC-2)

Approximately 86% of the watershed area is privately owned and coordination between regulatory agencies and private groups within the watershed is poor. Communication and coordination is an over-arching, non-hierarchical issue and represents a fundamental component of all specific issues and actions identified within the watershed. The compliance rate for existing WDR/NPDES programs is high. Existing regulatory programs related to point source discharges should be continued and increased emphasis placed on identifying and inspecting traditionally low priority and unregulated point source sites. Mercury in largemouth bass from Lake Pillsbury has been measured at concentrations exceeding FDA action levels for human consumption and the state Office of Health Hazard Assessment has issued a fish consumption advisory. Discharge from Lake Pillsbury may be contributing mercury to the Eel River watershed as well. Interbasin transfer of water between the Eel River and the Russian River may affect sediment budgets, flow rates, temperature dynamics and chemical concentrations within the Eel River. Lake Pillsbury may be acting as a source for squawfish found in the upper Eel River affecting recreational uses of the River.

Point Source Issues

Current Activities

- Continue point source regulatory programs.

Additional Needs

- Increase funding for identification and inspection of municipal, industrial and construction storm water facilities and traditionally unpermitted facilities such as junkyards, steam cleaners and maintenance yards.
- Increase inspections and develop general permits for lower priority land application facilities, recycling and composting facilities.
- Encourage improvements to publicly owned treatment plants adjacent to the river to reduce incidents of upsets and eliminate disposal of wastewater to gravel bars within the river channel.
- Coordinate and assist, as needed, during upcoming FERC permit reconsideration for Scott Dam. Negotiate flow releases and diversion schedules that enhance salmon and steelhead populations.

Nonpoint Source Issues

Current Activities

- Develop a sediment and temperature TMDL in conjunction with EPA in 2002-2004.
- Increase coordination with RCD and agricultural community to address rangeland issues and confined animal problems related to nutrient runoff and erosion.
- Reduce erosion associated with timber harvest and road systems.
- Continue grant programs for watershed assessment, planning, and restoration.
- Continue the current Toxic Substance Monitoring Program and the new SWAMP activities to develop and implement a focused sampling plan to assess water quality, sediment and bioaccumulation potential of mercury in upper mainstem Eel River.

Additional Needs

- Fund and implement a watershed-based sampling program that is prioritized and focused on specific issues/problems within the watershed. This will be addressed to a large degree by the NCWAP and SWAMP in FY 2001-02.
- Identify existing information and develop a central repository for information including database and possibly GIS capabilities. The NCWAP will begin development of a computerized database with GIS components in FY 2001-02 that should be available in 2003.
- Investigate the feasibility and impacts to beneficial uses if Eel River estuary and lower mainstem are dredged to remove well documented sediment clogging in watershed.
- Streamline 401 water quality certification program for small dischargers and encourage better use of existing BMP's for erosion.
- Endorse the concept of establishing a "river corridor". Encourage local and state agencies to evaluate appropriate land uses and industrial activities within a "river corridor". Coordinate with local planning agencies to review existing zoning and reevaluate incompatible land uses along the "river corridor".
- Increase coordination with timber companies to monitor herbicide application and pre- and post application chemical handling and disposal.

- Establish and fund a watershed coordinator position to develop outreach programs that include joint participation among landowner, government agencies and other stakeholders.

GOAL 3: Protect ground water uses (MUN, IND. AGR, REC-1, REC-2)
Activities that occur in the Eel River Watershed may result in the contamination and degradation of ground water. Beneficial uses identified for ground water in this watershed include, municipal, industrial, and agricultural water supply, and recreation. These uses may be impaired through discharges to ground water from chemical and biological materials. A few of the many activities which, if conducted improperly, are likely to impair ground water beneficial uses include: illegal disposal sites (including illegal landfills), vehicle and railroad maintenance yard operations, herbicide application, dairy operations, automotive wrecking yards or metal recycling activities, wood treatment facilities, underground tank operations, landfill operations, and other industrial facilities operations, publicly owned treatment works, and private septic systems.

Information needs to be gathered and placed into a database system. to help with the following: (1) identify the location of the problem areas of the watershed, (2) identify the location of the sensitive areas of the watershed, and (3) identify restoration areas and activities associated with the watershed.

In order to protect the beneficial uses of ground water in the Eel River WMA, the following list of issues and actions has been identified by Regional Water Board staff to be addressed:

Point Source Issues

Current Activities

- Continue the point source regulation program**.**

Nonpoint Source Issues

Current Activities

- Continue on-going activities associated with known ground water contamination.
- Prevent access to waste pits and ponds.
- Continue to coordinate with the County to review septic system situations to avoid ground water contamination. This includes enforcement of the Basin Plan requirement to ensure that the County reports septage disposal.
- Continue active participation in the Vegetation Management Advisory Committee and increase monitoring of the implementation of best management practices for herbicide applicators.
- Conduct follow-up activities.

Additional Needs

- Pursue additional Regional Water Board funding (PYs) for development of a database system (and possible GIS) to store, analyze, and assess existing information.
- Outreach and coordination as in other goals above.
- Pursue additional Regional Water Board funding (PYs) for staff and laboratory services to assess and address the illegal disposals and assess ground water quality.
- Prepare, develop, and implement a program to educate the public, local, city, and state agencies, along with private industry, on discharges of toxic chemicals.

- Encourage the agricultural community to advance to Chapter 15 requirements in order to avoid ground water contamination.
- Promote agronomic irrigation and agronomic disposal of wastes.

GOAL 4: Protect warm water fishery resources

The warm water fishery exists only in Lake Pillsbury, in the upper Eel River basin. Lake Pillsbury is a favored recreation area for residents of the North Coast. Contamination of the fisheries from naturally occurring mercury is a concern for sport fishing. Erosion of sediment above the dam exacerbates the level of mercury contaminated sediments entering the lake. Erosion of sediment from the upper portion of the basin may also be filling Lake Pillsbury, which may threaten the life of the reservoir. Existing information needs to be identified and collected so that we can assess impacts to the system and address problem areas. There is a need for a database system to help with identifying the location of the problems areas, sensitive areas, and areas for restoration activities. For the warm water fishery, information gathering and assessment should be confined to Lake Pillsbury. Discharges are a concern and may contribute to the impacts to the warm water fishery of Lake Pillsbury. These include discharges due to boating activities, such as MTBE in gasoline, septic systems, industrial/construction site runoff, etc.

Point Source Issues

We know of no specific point source issues in this part of the WMA.

Nonpoint Source Issues

Current Activities

Due to funding constraints, we have little involvement in issues other than timber harvesting activities and mercury accumulation in fish species.

Additional Needs

- The actions for above goals regarding data gathering and assessment, coordination, and outreach all apply to this issue.
- Coordinate more closely with the local watershed group, as well as the USFS, County Health and other local agencies that see the problems every day. Work with the county to ensure county controls are implemented.

BUDGET

We will attempt to fund the highest priority actions as identified in this WMA to the extent funding constraints allow that, and will pursue additional funding for those actions we are currently unable to address. Monitoring and assessment needs are detailed in Appendix 2.5-B.

Appendix 2.5-A

Partial listing of agencies and groups in the Eel River WMA with an interest and/or responsibility for water quality.

United States
- Environmental Protection Agency
- Army Corps of Engineers
- Forest Service
- Bureau of Land Management
- Geological Survey
- National Biological Service
- Fish and Wildlife Service
- National Marine Fisheries Service
- Natural Resources Conservation Service

Native American
- Round Valley Indian Reservation

California State
- California Environmental Protection Agency
- Resources Agency
- Department of Fish and Game
- Department of Health Services
- Department of Parks and Recreation
- Department of Pesticide Regulation
- Office of Environmental Health and Hazard Assessment
- Department of Toxic Substance Control
- Department of Water Resources
- California Coastal Conservancy
- UC Agricultural Extension
- Humboldt State University
- College of the Redwoods

Humboldt and Mendocino County
- Water Agency
- Planning Department
- Department of Environmental Health
- Agricultural Commissioner's Office

Local Agencies
- Resource Conservation Districts
  - Mendocino County RCD
  - Humboldt County RCD
- local water districts - numerous, to be compiled later
- city planning departments
- city public works departments

Public Interest Groups
- Farm Bureau
- United Dairymen

Cattlemen's Association
Eel/Russian Commission
Trout Unlimited
Salmon Unlimited
California Forestry Association
Eel River Watershed Improvement Group
Eel River Watershed Protection & Restoration Association
Environmental Protection Information Center
Elk River Watershed Conservancy
Friends of the Eel River
Humboldt Bay Watershed Advisory Committee
Institute for Sustainable Forestry
Redwood Community Action Agency
Round Valley Resource Center
Willits Watershed Group
Salmon Forever
Humboldt Watershed Council
Pacific Lumber Company

Appendix 2.5-B

Monitoring priorities and needs detail for the Eel River Watershed Management Area

Additional assessment by Regional Water Board staff is needed to test hypotheses about support of beneficial uses MUN, REC1, COLD, RARE, or provide assessment information essential for program implementation. They are currently not funded.

The estimates are Regional Water Board needs on a per year basis with desired fiscal years identified.

1. **Water temperature - $15,000 (0.1 PY + $4,000 supplies) – FY 00-05 (on going for five years)**
   High water temperatures affect coldwater salmonid species such as the coho and chinook salmon that are listed as threatened under the federal Endangered Species Act). The Humboldt RCD has completed a 205(j) project to provide a broad picture of water temperatures in the basin. Their continuing efforts focus on specific problem areas, but need assistance. SWAMP and NCWAP will address this to a large degree in FY 2001-02, 2002-03, and 2003-04.

2. **Sedimentation - $188,000 (0.8 PY + $100,000) – FY 02-03, 03-04, every 5 years thereafter**
   The entire Eel River watershed is section 303(d) listed for sediment impacts. The USEPA is developing TMDL waste reduction strategies, which will support gathering and assessment of existing information. Additional monitoring for the effectiveness of the actions is needed in the phased TMDL approach. The SWAMP and NCWAP will address this to some degree.

3. **Bacterial studies - $32,000 (0.2 PY + $10,000 lab) – FY 01-02**
   Contact recreation may be at risk in the Van Duzen and South Fork Eel. Absence of data on bacterial and parasitic (*Cryptosporidium, Giardia*) presence is lacking.

4. **Basic Assessment - $180,000 (1.0 PY + $70,000 lab) – FY 01-02**
   No specific body of recent (last 10 years) water quality data exists for the watershed as a whole. A check on basic water quality attendant to the focused assessments and monitoring proposed herein is needed to ensure no new problems are going unnoticed. Likewise, coordination of monitoring and assessment efforts and a compilation of existing data (a watershed atlas) are needed, but will be supported to a degree by TMDL activities. Sampling of POTWs for MtBE, other petroleum products, and metals is needed, both influent and effluent. The NCWAP will assess the Middle Fork Eel River in calendar year 2002.

5. **Groundwater Data Assessment - $33,000 (0.3 PY) – FY 01-02**
   A spatial organization of existing information is needed to first assess the extent of known problems. That will guide future focused monitoring and assessments and overall assessment of groundwater in the watershed.

6. **Groundwater/Stormwater Data Collection - $75,000 (0.5 PY + $20,000) – FY 01-02**
   Surface water and groundwater are contiguous in much of the watershed. Stormwater drainages are contributing animal waste products, gasoline, MtBE, metals (mostly Pb, Cr, Ni, Zn, Cu), solvents, and other petroleum products to the surface and ground waters to an unknown extent. We know there are problems in the Garberville and Fortuna areas, and suspect problems in the Willits, Carlotta, and Hydesville areas.

Surface Water Ambient Monitoring Program

Surface Water Ambient Monitoring Program Monitoring Stations

The SWAMP has addressed some monitoring issues in the WMA in FY 2000-01, and will investigate more intensively in FY 2001-02. Listed below are the planned and proposed monitoring activities under that program.

Long-term monitoring stations:

Five long-term stations were for setup in spring of 2001: South Fork at confluence, Bull Creek, and near Branscomb Creek; Eel River at Dos Rios; Middle Fork at Dos Rios; and North Fork at Mina. Other long-term stations in the WMA will be proposed if appropriate from the rotation in FY 2001-02.

The intensive survey:

will provide sampling sites in waterbodies in the WMA. Anticipated parameters are general water chemistry, nutrients, metals, organic chemicals, and sediment related parameters. We will address temperature and bacterial issues in the WMA during the intensive survey. For this rotation, stations have been added at Benbow, Elder Creek, Hearst and Alder Point.

Eel River Hydrologic Unit (111) - FY 2001-02 Monitoring Activities					
Station (Type) (1) HUC	Beneficial Use(s)	Monitoring Objectives (2)	Freq (3)	Category(s)	Indicator(s) (4)
VAN101 (R) 111.11 (Van Duzen River at Highway 101)	MUN, REC1, REC2, COLD, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	5 C	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic Water Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature,
EELHOL (P) 111.12 (Eel River at Holmes)	MUN, REC1, REC2, COLD, WARM, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	3 C 3 O	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic and Organic Water Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature,
YAGCAR (R) 111.12 (Yager Creek at Carlotta)	MUN, REC1, REC2, COLD, SPWN, MIGR, WILD, RARE	1,2,3,,9,10,11,12,13, 14, 15	5 C	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic Water Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature, Channel Morphology
VANBRG (R)	MUN, REC1, REC2, COLD, SPWN, MIGR	1,2,3,9,10,11,12,13	5 C	Contaminant	Inorganic Water Chemistry, Chl

Eel River Hydrologic Unit (111) - FY 2001-02 Monitoring Activities					
Station (Type) [1] HUC	Beneficial Use(s)	Monitoring Objectives [2]	Freq [3]	Category(s)	Indicator(s) [4]
111.22 (Van Duzen River at Bridgeville)	COLD, SPWN, MIGR, WILD, RARE	1,12,13		Exposure, Biological Response, Pollutant Exposure, Habitat	Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature,
VANBRG (R) 111.22 (Van Duzen River near Dinsmore)	MUN, REC1, REC2, COLD, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	5 C	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic Water Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature,
EELSFK (R) 111.30 (Eel River – South Fork d/s of Bull Creek)	MUN, AGR, REC1, REC2, COLD, WARM, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	5 C	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic Water Chemistry, PCP/TCP,Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature
EELBEN (R) 111.32 (Eel River – South Fork near Benbow)	MUN, AGR, REC1, REC2, COLD, WARM, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	5 C	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic and Organic Water Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature,
EELBRN (P) 111.33 (Eel River – South Fork near Branscomb)	MUN, AGR, REC1, REC2, COLD, WARM, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	3 C	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic Water Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature, Channel Morphology, Vitellogenin
ELDRCR (R) 111.33 (Elder Creek at	MUN, REC1, REC2, COLD, WARM, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	5 C	Contaminant Exposure, Biological	Inorganic and Organic Water Chemistry, Chl-

Eel River Hydrologic Unit (111) - FY 2001-02 Monitoring Activities					
Station (Type) [1] HUC	Beneficial Use(s)	Monitoring Objectives [2]	Freq [3]	Category(s)	Indicator(s) [4]
Eel River)				Response, Pollutant Exposure, Habitat	a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature,
EELMDV (P) 111.41 (Eel River above Dyerville)	MUN, AGR, REC1, REC2, COLD, WARM, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	3 C 3 O	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic Water Chemistry, PCP/TCP,Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature,
EELMAN (P) 111.41 (Eel River above Dos Rios)	MUN, AGR, REC1, REC2, COLD, WARM, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13,	3 C	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic Water Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature, Vitellogenin
EELALD (R) 111.42 (Eel River near Alder Point)	MUN, AGR, REC1, REC2, COLD, WARM, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	5 C	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic Water Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature,
NFELMI (R) 111.50 (Eel River – North Fork near Mina)	MUN, AGR, REC1, REC2, COLD, WARM, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	5 C	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic Water Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature,
EELHST (R) 111.62 (Eel River near Hearst)	MUN, AGR, REC1, REC2, COLD, WARM, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	5 C 3 O	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic Water Chemistry, PCP/TCP, Chl-a, Nutrients, Total Organic Carbon, Dissolved

Eel River Hydrologic Unit (111) - FY 2001-02 Monitoring Activities					
Station (Type) [1] HUC	Beneficial Use(s)	Monitoring Objectives [2]	Freq [3]	Category(s)	Indicator(s) [4]
					Oxygen, Water Temperature, Vitellogenin
LP01 (R) 111.63 Lake Pillsbury, Station #1	MUN, REC1, REC2, WARM, COLD, SPWN, MIGR, WILD, RARE	2, 3, 9	4	Pollutant Exposure, Habitat	MtBE, BTEX, Dissolved Oxygen, Water Temperature
LP02 (R) 111.63 Lake Pillsbury, Station #2	MUN, REC1, REC2, WARM, COLD, SPWN, MIGR, WILD, RARE	2, 3, 9	4	Pollutant Exposure, Habitat	MtBE, BTEX, Dissolved Oxygen, Water Temperature
LPOUT (R) 109.40	MUN, REC1, REC2, WARM, COLD, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	5 C	Contaminant Exposure, Biological Response, Pollutant Exposure Habitat	Inorganic Water Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature, MtBE, BTEX
EELVAN (R) 111.63 (Eel River at Van Arsdale Reservoir)	MUN, AGR, REC1, REC2, COLD, WARM, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	5 C 3 O	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic and Organic Water Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature, Vitellogenin
MFKEEL (P) 111.70 (Eel River – Middle Fork at Dos Rios)	MUN, AGR, REC1, REC2, COLD, WARM, SPWN, MIGR, WILD, RARE	1,2,3,9,10,11,12,13	3 C	Contaminant Exposure, Biological Response, Pollutant Exposure, Habitat	Inorganic Water Chemistry, Chl-a, Nutrients, Total Organic Carbon, Dissolved Oxygen, Water Temperature

Notes:
1. Type: P = Permanent, R = Rotating
2. Monitoring Objectives: From the November 30, 2000 Report to the Legislature, Section VI, Pages 22-25 (Attachment A)
3. Frequency: N = number of samples per FY, C= Conventional Water Chemistry
   O = Organic Water Chemistry
4. Indicator: From the November 30, 2000 Report to the Legislature, Section VII, Table 3, Pages 33-35 (Attachment A)

Other Monitoring Programs

The North Coast Watershed Assessment Program (NCWAP) is a multi-agency approach to gathering, developing, analyzing and presenting watershed assessments and data for north coast watersheds. In addition to the NCRWQCB, four agencies within the Resources Agency are involved: Department of Fish and Game, Department of Forestry and Fire Protection, Division of Mines and Geology, Department of Water Resources. Each has specific tasks relating to gathering existing data, filling information gaps by collecting new data, analyzing the data, and presenting the resulting watershed assessments in a standardized format for agency, landowners, and watershed groups. NCWAP will be closely coordinated with SWAMP and the outreach functions of the WMI Coordinator in the NCRWQCB. Within this WMA the following watersheds are scheduled for assessment in the next three fiscal years: FY 2001-02—Redwood Creek; FY 2002-03— middle Eel watersheds.

As mentioned above, the Humboldt RCD coordinates a temperature monitoring network in the WMA. We support and will assist that effort to the extent resources allow.

We continue to address concerns about mercury bioaccumulation in and below Lake Pillsbury through the Toxic Substance Monitoring Program and in coordination with the state Office of Health Hazard Assessment. Lake sediment analysis was performed during the spring of 2001 to supply data to Office of Environmental Health and Hazard Assessment. A food consumption advisory was issued in 2000.